

European Leadership in 5G

BACKGROUND

The concept of a fifth generation of mobile telecommunications (5G) has attracted a great deal of interest in the telecommunications industry over the past five years. It has also captured the imagination of politicians, governments, policy makers, regulators because of the promise of the next generation of mobile communications that will finally bring broadband internet wirelessly, seeding new jobs, new consumer and professional services and whole new market. However, as is common with advances in technology, there is a need to look beyond the industry hype to assess appropriate policy support.



FOCUS OF THE STUDY

The in depth analysis [European Leadership in 5G](#) examines the concept for 5G, how it might fit in the future telecommunications landscape, the state of play in R&D in the EU and globally, the possible business models and the role of standards and spectrum policy.

KEY FINDINGS

1. 5G beyond the hype

In general terms, the telecommunications industry sees 5G as the next global market that will serve smart consumer devices, with a major role to play in enabling the Internet of Things (IoT). The key question, however, is whether 5G enables services that consumers – business and individuals – are willing to pay for. In this regard, the 5G initiative in Europe, as well as globally, has so far failed to assess objectively the future needs of consumers.

2. Refining and Improving Policy Support for 5G

What is needed is a more effective and practical policy for 5G than seen to date, one in which the demand side takes precedence rather than simply supporting research for its own sake. It requires further analysis of two questions:

- What are the short-term applications for 5G, including their detailed business cases, and how can they be brought to market to stimulate new employment and exports?
- What are the long-term research areas that are likely to bring wide-ranging advances to meet consumer needs?

RECOMMENDATIONS

The study recommends to develop an Industrial Strategy to Support 5G Leadership in the EU, placing much greater emphasis on the long term to formulate a comprehensive industrial strategy to support EU leadership in 5G.

Recommendations are proposed for:

More precise definition of goals and scope for a 5G industrial policy

Planning long-term technology research for a new communications infrastructure

Spectrum policy for 5G based on spectrum sharing

Identification and support for shorter-term 5G applications for small-cell networks.

Authors argue that the long-term impact of the recommendations is likely to be considerable in terms of their effect on economic growth and employment, as the next generation of the local loop connection is rolled out using 5G technology, merging fixed-line access with mobile. The impact on economic growth and employment could be estimated but would require complex modelling to forecast the effects of more efficient telecommunications as a broad stimulus to business, the costs in deploying new networks, as well as the impact of seeding of new business models for new types of 5G operator.

Scan QR code to access the study



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